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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/421,055	04/12/1995	MICHAEL A. JOHNSON	49286USA9C	5806
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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			JOHNSTONE, ADRIENNE C	
		ART UNIT	PAPER NUMBER	
		1733		

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	08/421,055	JOHNSON ET AL.
Examiner	Art Unit	
Adrienne C. Johnstone	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 January 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6-13, 16-29, 31 and 32 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 6-13, 16-29, 31 and 32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 April 1995 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 071495.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. The amendment after final rejection filed January 22, 2003 has therefore been entered.

Double Patenting

2. The obviousness-type double patenting rejection made in the previous Office action is hereby WITHDRAWN: the claims now require the article placed on the surface of the substrate to comprise both the melt-flowable composition and the dimensionally stable *film*, however the polymeric cap recited in the claims of George et al. (5,964,979) when interpreted in light of the specification cannot be a film and still perform its required function, therefore it would not have been obvious to provide the polymeric cap in the form of a dimensionally stable film as would be required in order to meet the limitations of the instant claims in this application. Also, it should be noted that although the continuation of this application in Johnson et al. (6,030,701) claims substantially overlapping subject matter with this application, no double patenting rejection is made with respect to the Johnson et al. (6,030,701) claims because they are directed to the article rather than the method of using the article claimed in this application. Finally, it should be noted that although the continuation of parent application 08/150,692 in Johnson et al. (6,485,589) claims substantially overlapping subject matter with this application, no double patenting rejection is made with respect to the Johnson et al. (6,485,589) claims because they require placing on the surface an article comprising a plurality of melt-flowable layers and heating the article to cause *the article* to flow and conform to the surface, which is inconsistant with the instant claim language in this application requiring the article being heated to include

a dimensionally stable film which by definition (specification p. 27 lines 11-19 and p. 28 lines 9-13) does not flow during the heating step.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 18, 29, and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

In claims 18 and 29 applicants recite that the substantially smooth, paint-receptive surface of the dimensionally stable film comprises "a thermosetting epoxy-polyester blend", however the original disclosure only supports the substantially smooth, paint-receptive surface of the dimensionally stable film comprising -- a thermosetting epoxy-polyester blend film -- (specification p. 30 lines 8-12).

One way to overcome this rejection would be to amend claim 18 such that in line 4 after "blend" is inserted -- film -- , amend claim 29 such that in line 10 after "blend" is inserted -- film -- , and rewrite claim 31 as --

31. (currently amended) A method according to claim 29 wherein said dimensionally stable film comprises an oriented polyester film [provided on one] whose substantially smooth, paint-receptive surface [with] comprises a thermosetting epoxy-polyester blend film.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 18, 20, 29, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

See the new matter rejection in paragraph 4 above concerning the antecedent basis problems with the substantially smooth, paint-receptive surface of the dimensionally stable film comprising "a thermosetting epoxy-polyester blend" in claims 18, 29, and 31 (in the instant claim language it is not clear that the thermosetting epoxy-polyester blend is present *in addition to* the material of the dimensionally stable film). Also, in claims 29 and 31 the term "paint-receptive" is meaningless without the positive step of applying paint to the paint-receptive surface as in claims 17 and 27 because there is no definition in the specification for what makes a surface "paint-receptive" other than actually receiving paint (any surface is capable of "receiving" paint, there being no requirement that paint would adhere to the surface to any particular degree once applied to the surface). Finally, in claim 20 it is not clear what is required by the step of bonding a "component" to the surface of the film; for purposes of this examination this language will be interpreted as bonding anything to the surface of the film, including paint or another decorative layer, but clarification is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of

this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 6, 7, 16, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott (2,061,678) or, alternatively, Amberg et al. (3,697,369).

See the entire document of Scott, especially the embodiments of Figures 1-4: composite film comprising film 2 and melt-flowable skin 1 preferably of thermoplastic synthetic resin is applied to base material 3 under heat and pressure lower than that which would affect the film in order to protect, ornament or finish the base material (p. 1 col. 1 line 5 - col. 2 line 9: the film is therefore "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13) and is subsequently cooled to provide a bonded or welded product; skin 1 does not flow substantially beyond the film 2 (Figures 2-4, p. 3 col. 2 lines 15-65 and specific simulated photograph embodiment, p. 2 col. 1 line 49 - col. 2 line 66) and therefore the film 2 is inherently "controlling the melt-flow behavior" of the skin 1 to "substantially confine" the skin 1 to the area between the film 2 and the base material 3; film 2 has substantially smooth surface topography and retains this substantially smooth surface topography after cooling (see Figures 1-4, p. 2 col. 2 line 67 - p. 3 col. 2 line 65 especially p. 3 col. 1 lines 51-60 and specific simulated photograph embodiment, p. 2 col. 1 line 49 - col. 2 line 66). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

Alternatively, see Amberg et al. col. 2 line 5 - col. 8 line 10: a polypropylene film liner 10 having a decorative design 16, 18 printed on the underside thereof and a polyethylene layer 20 coated on and overlying the decorative design is bonded to a paper pulp base receptacle 26 under heat and pressure; the polyethylene is rendered tacky or molten by the heating and thus flows into the interstices between the fibers of the base receptacle 26 and, upon cooling, grips the fibers

and becomes firmly bonded thereto while leaving the polypropylene film liner 10 unaffected such that the polypropylene film retains its hard, smooth, glossy finish and its transparent nature throughout the bonding step and the designs 16 and 18 show clearly through the polypropylene film and present the desired attractive appearance (film liner 10 therefore has substantially smooth surface topography substantially retained during cooling and dimensional stability within applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13)(col. 2 line 66 - col. 3 line 6 and col. 6 line 49 - col. 7 line 29); providing excess liner material subsequently trimmed from the base receptacle 26 assures that the polyethylene flows over the entire upper surface of the base receptacle (col. 7 lines 51-60). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

9. Claims 6, 7, 12, 13, 16, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Defensive Publication T867,006 or, alternatively, Bialy (3,013,919).

See the specification of T867,006 pp. 1-12: emulsion-coated photographic film or paper is spliced with splicing tape comprising a flexible support of polymeric film which is preferably oriented polyethylene terephthalate MYLAR film (because is chemically inert, dimensionally stable, and extremely strong) and a layer of activated polyolefin which is preferably polyethylene or polypropylene by application of heat and pressure to achieve bonding; bonding is achieved "by applying heat and pressure to cause the polyolefin to flow and to force it into contact with the emulsion surface" (p. 2 lines 17-19); flexible support functions "to keep the molten polyolefin in place after release of the pressure and during the time that it is cooling" (p. 2 lines 24-26); the flexible support must inherently have a substantially smooth surface topography, retained after cooling (otherwise it would not be chemically inert, dimensionally stable, and extremely strong as

disclosed above), as well as a small as possible thickness "so as to minimize the tendency of the splice to form impressions in adjacent convolutions of the [photographic] film or paper when it is rolled" (p. 3 lines 12-16) and to avoid interfering with subsequent photographic processing of the spliced photographic film or paper. As to claims 21-24, the MYLAR film flexible support is dimensionally stable and therefore inherently meets these low shrinkage limitations. Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

Alternatively, see Bialy entire document: the laminated strap comprises a plastic base strip 12 and a covering strip 14 comprising bottom 16 of plastic compatible with the plastic of the base strip, such as polyethylene, and upper metallized MYLAR film 26 having substantially smooth surface 32 both before and after lamination (col. 2 lines 13-38 and 65-68)(MYLAR is a dimensionally stable oriented polyethylene terephthalate film as noted above); the covering strip is adhered to the base strip by heat causing a direct fusion or welding of the plastic bottom 16 with the plastic base strip 12, and the edges of the covering strip are turned downward and inward to embed them into the side edges of the base strip (and therefore during the fusion or welding of the plastic bottom 16 with the plastic base strip 12 the plastic bottom 16 cannot flow substantially beyond the edges of the film 26)(col. 1 line 59 - col. 2 line 3). As to claims 21-24, the MYLAR film 26 is dimensionally stable and therefore inherently meets these low shrinkage limitations. Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

10. Claims 6, 8, 16, 21-24 rejected under 35 U.S.C. 102(b) as being anticipated by Douglas et al. (2,647,849).

See entire document: lettering film 10, consisting of decorative weather-resistant protective film layer 12 and non-tacky heat activatable waterproof adhesive layer 11, is applied to a work surface such as reflex-reflective beaded surface 16 under heat and pressure to permanently bond the film 10 to the surface 16, the adhesive conforming to the irregular surface of the work-piece while leaving the weather-resistant decorative layer 12 unchanged (col. 2 line 51 - col. 3 line 41)(therefore the film layer 12 is "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13, and the surface topography of the film layer 12 is substantially retained upon cooling); the adhesive does not flow past the boundaries of the decorative film so that the adhesive will not interfere with the reflex-reflection of the underlying beaded surface 16 (col. 1 line 48 - col. 2 line 36). As to claim 8, the permanent nature of the bond requires the heat activatable adhesive to be thermosetting; also, the adhesives used in the examples are thermosetting. As to claim 16, the exemplary surface topography is smooth and glossy (col. 5 lines 8-66). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

11. Claims 6, 8, 16, and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Marshall et al. (2,789,155).

See entire document, especially Examples 1-5: a heat-curable adhesive tape comprises a cured, elastomeric organopolysiloxane film backing 1 and a heat-curable organopolysiloxane adhesive layer 2; the film backing is preferably made by calendering such as by passing the material through squeeze rolls, thereby imparting a substantially smooth surface topography to

the film, and then cured to form a thin film as shown in Figure 1 (col. 3 lines 35-69, col. 6 lines 3-8 and col. 9 lines 38-47: the curing of the film backing renders the surface topography of the film impervious to the effects of the subsequent bonding heat and pressure and renders the film "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13); adhesive tape is half-lap wound around a copper bar, then heat and pressure are applied to cause the adhesive to flow and form essentially void-free bonds with the copper bar and the film backing of the adjacent overlapped winding of the adhesive tape upon curing of the adhesive as in Figure 2 while maintaining adhesion in both the unvulcanized (uncured) and vulcanized state of the adhesive layer to the film backing either prior to winding or after winding (adhesive layer does not substantially flow beyond the film backing)(col. 4 line 26 - col. 5 line 14, col. 7 line 34 - col. 8 line 18, and col. 9 lines 1-56). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

12. Claims 6, 8, 9, 16, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu et al. (5,126,188) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider 102(b) rejections based on the Japanese equivalents JP 3-10545 U, JP 3-208221 A, and JP 4-28724).

See col. 2 lines 34-46, col. 2 line 64 - col. 5 line 68, and Examples 1-10: film-coated shaped material used for sealing an electronic part is "blanked in a shape in conformity with the configuration of the portion of the electronic part to be sealed" (col. 5 lines 10-13), has "high shape retentivity" (col. 2 lines 34-36), and comprises a plastic film "diminished in warping property" (col. 4 lines 63-64)(therefore the film is "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13, and could have no substantial shrinkage

during the heating step due to the required coverage of the portion of the electronic part to be sealed); the plastic film "gives excellent smoothness and gloss to the surface of the cured seal" (substantially smooth surface topography substantially retained during cooling) and has a thickness of 10 to 1000 μ to control by surface tension the flow of the sealing material when melted by heating and thereafter cured and adhered by continued heating (col. 4 lines 48-56 and col. 5 lines 24-68); an exemplary sealing material is a thermosetting epoxy-polyester blend (Examples 1, 3, 5, 7, and 9: thermoplastic polyester is highly crystalline, so blend with epoxy is semicrystalline). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

13. Claims 6-8, 16, 17, and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Artzt (2,739,919).

See entire document: coating film 24 is cast on the smooth surface of carrier strip 12 and solidified (cured) before depositing thereon an adhesive film of the thermal fusion (thermoplastic) or thermosetting type (therefore the film is "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13); coating film 24 with the adhesive film thereon is bonded to a fabric or material to be coated 34 under heat and pressure sufficient to fuse the adhesive to the fabric or material being coated 34, leaving the surface of the coating film smooth after bonding (col. 4 lines 50-54); after the adhesive passes under doctor blade 20 past guides 18 it is confined within the surface of the coating film 24, thus the coating film 24 ensures complete adhesive coverage of the surface of the fabric or material being coated 34 (col. 3 lines 19-54); an inked or painted impression can be applied to the smooth surface of the coating film 24 simultaneously with the formation of the coating film 24 (col. 4 lines 32-37); coating film

24 by definition does not shrink once solidified (cured), and further one of ordinary skill in the art would understand that the coating film 24 does not shrink during the bonding step in view of the disclosure that if the fabric or material to be coated 34 would normally shrink during the bonding step it must be pre-shrunk so that "no distortion of the lamination will occur" during the bonding step "to ensure the dimensional stability of the lamination" (col. 3 line 66 - col. 4 line 2). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

14. Claims 6, 7, 16, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kline et al. (2,631,947).

See Kline et al. col. 1 line 1 - col. 4 line 11, col. 7 line 58 - col. 8 line 46, and Example 49: heat sealing adhesive tape such as hot iron mending or ornamental tape for household fabrics and laundry goods comprises a usually porous nonfibrous film backing, an inner higher softening thermoplastic adhesive layer, and an outer lower softening thermoplastic adhesive layer, the two adhesive layers being compatible when melted and blended together during bonding; a piece of the tape is placed adhesive side down over a torn portion of fabric to be mended or a portion of fabric to be ornamented, then heat and pressure sufficient to make the adhesive soften and flow are applied by a hot iron such that after cooling the adhesive forms a bond between the tape and the fabric without the adhesive flowing beyond the film backing (col. 1 line 44 - col. 2 line 15 and col. 7 line 58 - col. 8 line 2); the film backing prevents undue penetration of the adhesive into the body of the backing and consequent loss of adhesive body on the surface of the backing (col. 1 lines 26-30) and separates the adhesive from the hot iron during bonding, so the film backing cannot melt or flow during bonding (which makes the film backing

"dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13) and thus substantially maintains its surface topography after cooling; the film backing must not have an irritating "feel" (col. 3 lines 16-18) and therefore the surface topography of the film must be substantially smooth; the two adhesive layers cooperate to provide sufficient mutual anchorage and satisfactory reinforcement of the weaker low softening layer (col. 2 line 16 - col 3 line 33). Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

15. Claims 6-8, 12, 13, 16, 20-24, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Stow (4,568,602).

See entire document: tape in Figure 1 comprises electrically insulating sheet or backing 11 of biaxially oriented polyethylene terephthalate film heat-treated to develop superior thermal dimensional stability, first adhesive layer 13 of thermosetting pressure-sensitive "hot-tackifying" acrylic terpolymer A having a T_g of 20°C, electrically insulating adhesive layer 15 of thermosetting pressure-sensitive "hot-tackifying" acrylic terpolymer B having a T_g of 0°C (col. 7 line 35 - col. 8 line 7). When the tape is bonded to substrate 18 in Figure 2, the substantially smooth surface topography of the film 11 is retained; adhesive layer 13 blends with adhesive layer 15 such that the higher- T_g acrylic terpolymer A contributes greater firmness at room temperature and the lower- T_g acrylic terpolymer B contributes ready flowability and assists in formation of the desired adhesive bond (col. 6 lines 1-24 and col. 8 lines 25-30); the film 11 must substantially confine the adhesive within the borders of the film (col. 6 line 31 - col. 7 line 6) in order to fulfill its function of connecting the terminal pads of a printed circuit board (col. 1 line 13 - col. 2 line 28 and col. 8 lines 8-24). As to claim 7, the adhesive may be thermoplastic (col. 4 line 66 - col. 5

line 5). As to claim 20, a release liner or low-adhesion backsize may be bonded to the surface of film 11 (col. 7 lines 7-11). As to claims 21-24, the film 11 is dimensionally stable and therefore inherently meets these low shrinkage limitations. Note that with respect to any inherent feature discussed above, the reasoning supplied in the discussion provides sufficient basis for the examiner to infer that the feature is inherent; burden is therefore shifted to applicants to show lack of inherency (see for example the case law cited in MPEP 2112-2112.02).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 6, 7, 16, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott (2,061,678) or, alternatively, over Amberg et al. (3,697,369).

See paragraph 8 above: with respect to Scott, the reference teaches that the film must not be affected by the heat and pressure during the bonding or welding to the base material; this is especially true in the specific simulated photograph embodiment (p. 2 col. 1 line 49 - col. 2 line 66) where any shrinkage of the film would prevent the faithful reproduction of the image. It

would therefore have been obvious to one of ordinary skill in the art to follow the teachings of the reference by choosing the parameters in the above method such that the film did not shrink during the bonding or welding to the base material under heat and pressure. Also, the reference teaches that the composite film is applied in order to protect, ornament or finish the base material; this is especially true in the specific simulated photograph embodiment (p. 2 col. 1 line 49 - col. 2 line 66) where flow of the skin beyond the area between the film and the base material would prevent the faithful reproduction of the image. It would therefore have been obvious to one of ordinary skill in the art to follow the teachings of the reference by choosing the parameters in the above method such that the skin does not flow substantially beyond the area between the film and the base material during the bonding or welding of the film to the base material (thus fulfilling the composite film's protective, ornamental and finishing functions).

Alternatively, see paragraph 8 above: with respect to Amberg et al., the reference teaches that the film liner must be unaffected by the bonding heat and pressure such that the polypropylene film retains its hard, smooth, glossy finish and its transparent nature throughout the bonding step and the designs 16 and 18 show clearly through the polypropylene film and present the desired attractive appearance. It would therefore have been obvious to one of ordinary skill in the art to follow the teachings of the reference by choosing the parameters in the above method such that the film liner did not shrink during the bonding to the base receptacle under heat and pressure.

19. Claims 6, 7, 12, 13, 16, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Defensive Publication T867,006 or, alternatively, over Bialy (3,013,919).

See paragraph 9 above: with respect to T 867,006, it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by providing the flexible support with a substantially smooth surface topography, retained after cooling (otherwise it would not be

chemically inert, dimensionally stable, and extremely strong as disclosed above), as well as a small as possible thickness "so as to minimize the tendency of the splice to form impressions in adjacent convolutions of the [photographic] film or paper when it is rolled" (p. 3 lines 12-16) and to avoid interfering with subsequent photographic processing of the spliced photographic film or paper. As to claims 21-24, it would have been obvious to one of ordinary skill in the art to prevent shrinkage of the flexible support during bonding in order to avoid distortion of the photographic film or paper at the splice regions, thereby assuring that the spliced photographic film or paper can fulfill its function by undergoing subsequent photographic processing.

Alternatively, see paragraph 9 above: with respect to Bialy, it would have been obvious to one of ordinary skill in the art to provide the metallized MYLAR film with a substantially smooth surface 32, both before and after lamination (due to its dimensional stability), and to prevent shrinkage of the film during lamination so as not to detract from the metallized finish of the film surface.

20. Claims 6, 8, 16, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas et al. (2,647,849).

See paragraph 10 above: it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by choosing the parameters in the above method such that the adhesive does not flow past the boundaries of the decorative film so that the adhesive will not interfere with the reflex-reflection of the underlying beaded surface 16 (col. 1 line 48 - col. 2 line 36).

21. Claims 6, 8, 16, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al. (2,789,155).

See paragraph 11 above: the reference teaches to maintain adhesion in both the unvulcanized (uncured) and vulcanized state of the adhesive layer to the film backing either

prior to winding or after winding to assure that a good bond is formed between the adhesive layer and either the surface to which it is adhered or to the cured film backing (adhesive layer does not substantially flow beyond the film backing upon curing of the adhesive)(col. 4 line 64 - col. 5 line 3). It would therefore have been obvious to one of ordinary skill in the art to follow the teachings of the reference by choosing the parameters in the above method such that the adhesive layer does not substantially flow beyond the film backing upon curing of the adhesive.

22. Claims 6, 8, 9, 16, 21-24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. (5,126,188) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on the Japanese equivalents JP 3-10545 U, JP 3-208221 A, and JP 4-28724).

See paragraph 12 above: the reference teaches that the film-coated shaped material used for sealing an electronic part is "blanked in a shape in conformity with the configuration of the portion of the electronic part to be sealed" (col. 5 lines 10-13), has "high shape retentivity" (col. 2 lines 34-36), and comprises a plastic film "diminished in warping property" (col. 4 lines 63-64) and that the plastic film "gives excellent smoothness and gloss to the surface of the cured seal" (col. 5 lines 58-60), therefore it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by making the film "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13, with no substantial shrinkage during the heating step in order to maintain the required coverage of the portion of the electronic part to be sealed, and to provide the film with a substantially smooth surface topography before bonding in order to assure that the surface topography after bonding is sufficient to obtain the required "excellent smoothness and gloss". As to claim 28, the plastics film may be polyester (col. 4 lines 48-62) and oriented polyester film such as MYLAR is notoriously well known to possess dimensional stability; it would therefore have been obvious to one of ordinary skill in the art to

use oriented polyester film such as MYLAR as the plastics film in the above method in order to obtain the required "high shape retentivity" and "diminished warping property" in the plastics film.

23. Claims 6-8, 16, 17, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artzt (2,739,919).

See paragraph 13 above: it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by ensuring that the coating film 24 confines the adhesive within the borders of the coating film 24, thus providing complete coverage by the adhesive of the surface of the fabric or material being coated 34, and that the coating film 24 did not shrink during the bonding step so that "no distortion of the lamination will occur" during the bonding step "to ensure the dimensional stability of the lamination" (col. 3 line 66 - col. 4 line 2).

24. Claims 6, 7, 16, 21-24, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline et al. (2,631,947).

See paragraph 14 above: it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by making the film backing confine the adhesive to the borders of the film so that the adhesive would not flow beyond the film backing to make an unsightly bond (col. 1 line 44 - col. 2 line 15 and col. 7 line 58 - col. 8 line 2); by making the film "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13, with no substantial shrinkage during the heating step in order to prevent undue penetration of the adhesive into the body of the backing and consequent loss of adhesive body on the surface of the backing (col. 1 lines 26-30), to separate the adhesive from the hot iron during bonding (col. 7 line 58 - col. 8 line 2), and to avoid puckering in the bonded area which would also result in an unsightly bond; and by substantially retaining a smooth film surface topography in order to avoid having an irritating "feel" (col. 3 lines 16-18).

25. Claims 6-8, 12, 13, 16, 20-24, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stow (4,568,602).

See paragraph 15 above: it would have been obvious to one of ordinary skill in the art to follow the teachings of the reference by making the film 11 substantially confine the adhesive within the borders of the film (col. 6 line 31 - col. 7 line 6) in order to fulfill its function of connecting the terminal pads of a printed circuit board (col. 1 line 13 - col. 2 line 28 and col. 8 lines 8-24). As to claim 7, the adhesive may be thermoplastic (col. 4 line 66 - col. 5 line 5). As to claim 20, a release liner or low-adhesion backsize may be bonded to the surface of film 11 (col. 7 lines 7-11).

26. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Defensive Publication T867,006 or, alternatively, Bialy (3,013,919) as applied to claims 6, 7, 12, 13, 16, and 21-24 above, or over Artzt (2,739,919) as applied to claims 6-8, 16, 17, and 20-24 above, and further in view of Leatherman et al. (4,877,679) and Leatherman et al. (4,892,779).

See paragraph 19 above: with respect to T867,006, it would have been obvious to one of ordinary skill in the art to make the splicing tape flexible support polymeric film from biaxially oriented ultra high molecular weight microporous polyolefin film because such films, like the exemplary MYLAR film, have the required strength and dimensional stability and are particularly well suited to bonding to polyolefins such as the polyethylene or polypropylene splicing tape bonding layer (Leatherman et al. '679 col. 1 line 1 - col. 2 line 36, col. 11 lines 24-32, and col. 14 lines 9-16 and Leatherman et al. '779 col. 1 line 1 - col. 2 line 2, col. 8 lines 41-56, col. 10 lines 58-66, and col. 14 lines 19-26).

Alternatively, see paragraph 19 above: with respect to Bialy, it would have been obvious to one of ordinary skill in the art to make the covering strip upper film 26 from decoratively printed biaxially oriented ultra high molecular weight microporous polyolefin film because such films,

like the exemplary metallized MYLAR film, have strength and dimensional stability and are particularly well suited to bonding to polyolefins such as the polyethylene bottom 16 (Leatherman et al. '679 col. 1 line 1 - col. 2 line 36, col. 11 lines 24-32, col. 11 line 64 - col. 12 line 44, and col. 14 lines 9-16 and Leatherman et al. '779 col. 1 line 1 - col. 2 line 2, col. 8 lines 41-56, col. 10 lines 58-66, and col. 14 lines 19-26).

Alternatively, see paragraph 23 above: it would have been obvious to one of ordinary skill in the art to make coating film 24 from ultra high molecular weight microporous polyolefin because such film also has dimensional stability (does not flow once solidified) and is particularly well suited to accept inked or painted impressions (Leatherman et al. '679 col. 1 lines 5-10, col. 2 lines 26-35, col. 12 lines 3-44, and col. 12 line 62 - col. 13 line 3 and Leatherman et al. '779 col. 1 lines 10-15, col. 1 line 60 - col. 2 line 2, col. 11 line 47 - col. 12 line 34, and col. 12 line 52 - col. 13 line 3).

27. Claims 18, 19, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artzt (2,739,919) as applied to claims 6-8, 16, 17, and 20-24 above, and further in view of the admitted prior art.

See paragraph 23 above: the claimed film of thermosetting epoxy-polyester blend or ethylene-vinyl alcohol is a conventional adhesion promoter to standard paints and primers, as evidenced by applicants (specification p. 30 lines 8-12) for example; it would therefore have been obvious to one of ordinary skill in the art to provide the coating film 24 with such a conventional adhesion promoter to the inked or painted impressions.

28. Claims 6, 8, 16, 17, 20, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application 1-152049 A in view of Shimizu et al. (5,126,188) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on the Japanese equivalents JP 3-10545 U,

JP 3-208221 A, and JP 4-28724) and Reaney (5,162,149) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on equivalent WO 91/18069).

The only difference between the prior art roof ditch sealing method and the claimed method is that the sealing tape forming the substantially smooth, paint-receptive surface for subsequent painting is not provided with a dimensionally stable film backing, as evidenced by JP 1-152049 A (translation and figures) for example; however, it is well known to provide such sealing tape with a dimensionally stable film backing in order to confine the adhesive to the desired area to be sealed, as evidenced by Shimizu et al. (discussed in paragraph 12 above) and Reaney (col. 1 line 12 - col. 2 line 14) for example. It would therefore have been obvious to one of ordinary skill in the art to provide the sealing tape in the prior art roof ditch sealing method with a dimensionally stable film backing in order to confine the adhesive to the desired area to be sealed.

29. Claims 18, 19, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application 1-152049 A in view of Shimizu et al. (5,126,188) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on the Japanese equivalents JP 3-10545 U, JP 3-208221 A, and JP 4-28724) and Reaney (5,162,149) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on equivalent WO 91/18069) as applied to claims 6, 8, 16, 17, 20, and 25-27 above, and further in view of the admitted prior art.

See paragraph 28 above: the claimed film of thermosetting epoxy-polyester blend or ethylene-vinyl alcohol is a conventional adhesion promoter to standard paints and primers, as evidenced by applicants (specification p. 30 lines 8-12) for example; it would therefore have been

obvious to one of ordinary skill in the art to provide the dimensionally stable film backing of the sealing tape forming the substantially smooth, paint-receptive surface for subsequent painting in the above method with such a conventional paint adhesion promoter. As to claim 31, oriented polyester film such as MYLAR is notoriously well known to possess dimensional stability; it would therefore have been obvious to one of ordinary skill in the art to use such notoriously well known oriented polyester film as the dimensionally stable film in the above method.

30. Claims 9, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application 1-152049 A in view of Shimizu et al. (5,126,188) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on the Japanese equivalents JP 3-10545 U, JP 3-208221 A, and JP 4-28724) and Reaney (5,162,149) (note that if this rejection is overcome by means other than amending the claims to distinguish over the reference the examiner will consider rejections based on equivalent WO 91/18069) as applied to claims 6, 8, 16, 17, 20, and 25-27 above, and further in view of Schappert et al. (4,822,683).

See paragraph 28 above: it is well known to use the claimed semi-crystalline thermosetting epoxy-polyester blend adhesive in such automotive applications in order to obtain the known benefits of epoxy resin adhesives without the detrimental adhesive shrinkage upon curing (col. 1 lines 10-55 and col. 6 lines 20-41: thermoplastic polyester is highly crystalline, so blend with epoxy is semicrystalline); it would therefore have been obvious to use the claimed semi-crystalline thermosetting epoxy-polyester blend adhesive in the above roof ditch sealing method in order to obtain the known benefits of epoxy resin adhesives without the detrimental adhesive shrinkage upon curing. As to claims 12 and 13, oriented polyethylene terephthalate film such as MYLAR is notoriously well known to possess dimensional stability and is the exemplary dimensionally stable film in Shimizu et al.; it would therefore have been obvious to one of

ordinary skill in the art to use such notoriously well known oriented polyethylene terephthalate film as the dimensionally stable film in the above method.

Allowable Subject Matter

31. Although the extensive disclosure and numerous claims make it difficult for the examiner to identify allowable subject matter at this time, one feature that might receive favorable consideration when added to claim 26 is the requirement that the article has a length equal to the length of the roof ditch and a width slightly greater than the width of the roof ditch (specification p. 8 lines 3-5) such that the dimensionally stable film takes on a concave configuration along the length of the roof ditch to provide a channel to carry water off the roof of the vehicle (specification p. 8 lines 14-17).

Conclusion

32. It should be noted that the application file for parent application 08/047,862 (of which this application is a continuation-in-part) is not available to the examiner at this time, so the appropriate effective filing date for each of the instant claims cannot yet be determined.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrienne C. Johnstone whose telephone number is (571)272-1218. The examiner can normally be reached on Monday-Friday, 10:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Adrienne Johnstone

November 10, 2004

